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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,954	06/20/2001	Norimitsu Kasai	209866US2	2607
22850	7590	11/05/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HO, THOMAS M	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/883,954

Applicant(s)

KASAI ET AL.

Examiner

Thomas M Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-6 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Sherer et al., US patent 5,568,476.

In reference to claim 1:

Sherer et al. discloses a method of verifying a result of distribution of information comprising steps of:

- Transmitting, from a sender station to a receiver station information to be distributed while the information is divided into a plurality of unit data sets, where the unit data sets are data packets of the transmission. (Column 6, lines 45-50, lines 58-60)
- Transmitting a plurality of verification signals corresponding to the respective unit data sets from the sender station to itself and receiving the verification signals at the sender station, where the plurality of verification signals is the transmission

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of the packets of data sent out from the sender station, and the received signals is the collision detection. (Column 2, lines 49-62)

- Transmitting from the receiver station to the sender station, a jamming signal in synchronism with a verification signal corresponding to an unsuccessfully received data set, for hindering the sender station from receiving the distribution verification signal (Column 12, lines 30-37)
- Verifying occurrence of unsuccessful distribution of a unit data set corresponding to the verifying signal, from occurrence of a failure of the sender station to receive the verification signal transmitted to itself due to the jamming signal sent from the receiver station, where the unsuccessful distribution of the unit data set corresponding to the verifying signal is determined to be from the jamming signal sent from the receive station, which then causes the sender to try again later. (Column 12, lines 30-37)

In reference to claim 4:

Sherer et al. discloses a sender station which verifies a result of distribution after distribution of information to a receiver station, comprising:

- Information distribution means which transmits the information while the information is divided into a plurality of unit data sets, at the time of distribution of the information to the receiver station, where the information is divided into packets. (Column 2, lines 48-50)
- Verification signal transmission means which transmits, to the sender station itself, a plurality of verification signals corresponding to the unit data sets, where

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the plurality of verification signals are the packets of the transmission. (Column 2, lines 49-62)

- Verification signal receipt means for receiving a verification signal transmitted by the verification signal transmission means, where the verification signal received is the detection of a collision. (Column 2, lines 49-62)
- Distribution result determination means for determining that, when a jamming signal transmitted from the receiver station hinders the verification signal receipt means from receiving a verification signal, distribution of a unit data set corresponding to the verification signal has failed. (Column 12, lines 30-37)

In reference to claim 5:

Sherer et al. discloses a receiver station which receives information distributed by a sender station, comprising:

- Distributed information receipt means for receiving the information which has been transmitted from the sender station while being divided into a plurality of data sets, where the receipt means is a receiver. (Column 6, lines 45-52)
- Jamming signal transmission means which transmits a jamming signal for hindering the sender station from receiving the verification signal, in synchronism with a verification signal corresponding to a unit data set unsuccessfully received by the distributed information receive means from among the plurality of verification signals transmitted by the sender station. (Column 12, lines 30-37)

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5, Claim 2, 3, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherer et al., US patent 5,568,476.

Claim 2 is rejected for the same reasons as claim 6.

In reference to claim 3:

Sherer et al. fails to explicitly disclose a method of verifying a distribution result according to claim 1, wherein the verification signal includes an ordinal number assigned to a unit data set corresponding to the verification signal.

The Examiner takes official notice that assigning an ordinal number to a unit data set in any transmission was well known in the art at the time of invention. Particularly prevalent, is the usage of the TCP/IP protocol today used by the Internet, which breaks up information into constituent packets. These packets are numbered, and are often transmitted out of order by different servers. At their destination, they are reassembled.

It would have been obvious to one of ordinary skill in the art at the time of invention to number unit data sets of a transmission in order to provide the advantage of sending a

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signal over many different channels, and maintaining an ordering so that they may be reassembled.

In reference to claim 6:

Sherer et al. fails to disclose a receiver station according to claim 5, wherein the plurality of verification signals are time-division signals assigned to time slots which are identical in number to the unit data sets,

Sherer et al. (Column 12, lines 30-37) discloses the jamming signal transmission means assigns the jamming signal at the same time as that allocated a verification signal corresponding to the unit data set unsuccessfully received by the distributed information receipt means, where the jamming signal happens when that particular transmission by the sender cannot be received. The jamming signal is associated with the unit data so that if the transmission of the unit data is unsuccessful, the data will at some point later be retransmitted.

The Examiner takes official notice that dividing a plurality of signal such that they are time division signals assigned to time slots was well known in the art at the time of invention. This kind of transmission is better known as TDMA, or Time Division Multiple access, or TDM, Time division multiplexing. This is generally understood in the art to refer to "a type of multiplexing where two or more channels of information are transmitted over the same link by allocating a different time interval ("slot" or "slice") for the transmission of each channel." –The Free Dictionary of Online

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Computing. This methodology is used because it provides the advantage of sharing a link in an organized manner.

It would have been obvious to one of ordinary skill in the art to divide the verification signals assigned to the time slots, identical in number to the unit data sets, where the jamming signal is assigned to the same slot corresponding to it, in order to transmit the data by sharing a single link or frequency of transmission, and to detect for anomalies specific to a unit data of transmission.


Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M Ho whose telephone number is (571) 272-3835. The examiner can normally be reached on M-F from 9:30am – 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached at (571)272-3838. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5484.

TMH


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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October 27th, 2004